

VIBRO SHIFTER

Vibro shifters, also known as vibratory sieves or vibrating screens, are widely used in various industries for the separation, grading, and screening of solid materials. Here's an overview of the utilization of vibro shifters and the associated processes:



Particle Size Separation:

Vibro shifters are primarily used for particle size separation, where materials are sorted into different size fractions. The material is fed onto the vibrating screen, and the vibratory motion of the screen deck causes the particles to pass through the screen openings based on their size. This process helps in obtaining uniform particle size distribution and separating materials into different grades or classifications.

Grading and Sorting:

Vibro shifters are effective in grading and sorting materials based on their size or other characteristics. By using screens with different mesh sizes or opening sizes, the vibro shifter can separate materials into multiple fractions or grades. This is useful in industries such as food, pharmaceuticals, and chemicals, where materials need to be classified based on size or quality.

Scalping and Dedusting:

Vibro shifters can be used for scalping or removing oversized or undersized particles from a material stream. This helps in ensuring the desired particle size range and removing unwanted impurities. Additionally, the vibrating action of the screen can assist in dedusting or removing fine particles or dust from the material.

Liquid Solid Separation:

In some applications, vibro shifters are employed for the separation of solid particles from liquid suspensions. The vibrating screen effectively separates the solid particles from the liquid, allowing for the recovery of valuable solids or the clarification of liquids.

The process of utilizing a vibro shifter typically involves the following steps:

- ◆ **Material Preparation:**
The material to be screened is prepared and made ready for introduction onto the vibrating screen. This may involve grinding, crushing, or conditioning the material, depending on the specific application.
- ◆ **Adjusting Parameters:**
The operating parameters of the vibro shifter, such as vibration amplitude, screen deck inclination, and screen mesh size, are adjusted based on the desired separation or grading requirements and the characteristics of the material being processed.
- ◆ **Loading:**
The prepared material is fed onto the vibrating screen through a feed hopper or conveyor. The material evenly spreads across the screen surface.

- ◆ **Vibratory Motion:**
The vibro shifter is activated, and the screen deck starts vibrating at a controlled frequency and amplitude. The vibratory motion of the screen causes the material to stratify and separate based on particle size or other characteristics.
- ◆ **Separation and Grading:**
The material passes through the screen openings, and the desired fractions or grades are collected in separate discharge outlets or containers. Oversized or undersized particles are either collected separately or redirected for further processing.
- ◆ **Monitoring and Control:**
The separation process is monitored to ensure the desired separation efficiency and product quality. Adjustments to the operating parameters can be made if necessary.
- ◆ **Cleaning and Maintenance:**
After use, the vibro shifter is cleaned thoroughly to remove any residual material and ensure proper hygiene. Routine maintenance tasks, such as screen inspection, tightening of fasteners, and lubrication, are also performed as needed.

The utilization and specific process of a vibro shifter may vary depending on the industry, application, and the nature of the materials being processed. However, the versatility, efficiency, and customizable features of vibro shifters make them valuable equipment for particle size separation, grading, and liquid-solid separation processes in various industries.

Technical Specifications Table:-

MODEL	12"	20"	30"	36"	48"
SCREENS	SS 316/304	SS 316/304	SS 316/304	SS 316/304	SS 316/304
SCREENS DIA.	335 mm	520 mm	750 mm	950 mm	1220 mm
CAPACITY/HOUR*	20 to 70 kgs	20 to 140 kgs	30 to 250 kgs	820 to 300 kgs	200 to 400 kgs
CHARGING HEIGHT	1080 mm	1200 mm	1200 mm	1200 mm	1050 mm
DISCHARGE HEIGHT	625 mm	750 mm	750 mm	750 mm	500 mm
ELECTRIC MOTOR	0.25 HP Vibratory motor	0.25 HP Vibratory motor	0.5 HP Vibratory motor	0.5 HP Vibratory motor	1.5 HP Vibratory motor